



IFW

**TRANSMITTAL  
FORM**

(to be used for all correspondence after initial filing)

		Application Number	10/619,940
		Filing Date	July 14, 2003
		First Named Inventor	Michalicek, M. A.
		Art Unit	2872
		Examiner Name	Unassigned
Total Number of Pages in This Submission	1	Attorney Docket Number	19930-001410

**ENCLOSURES (Check all that apply)**

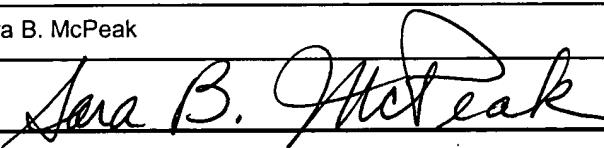
<input type="checkbox"/> Fee Transmittal Form	<input type="checkbox"/> Drawing(s)	<input type="checkbox"/> After Allowance Communication to Group		
<input type="checkbox"/> <input type="checkbox"/> Fee Attached	<input type="checkbox"/> Licensing-related Papers	<input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences		
<input type="checkbox"/> Amendment/Reply	<input type="checkbox"/> Petition	<input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief)		
<input type="checkbox"/> <input type="checkbox"/> After Final	<input type="checkbox"/> Petition to Convert to a Provisional Application	<input type="checkbox"/> Proprietary Information		
<input type="checkbox"/> <input type="checkbox"/> Affidavits/declaration(s)	<input type="checkbox"/> Power of Attorney, Revocation	<input type="checkbox"/> Status Letter		
<input type="checkbox"/> Extension of Time Request	<input type="checkbox"/> Change of Correspondence Address	<input checked="" type="checkbox"/> Other Enclosure(s) (please identify below):		
<input type="checkbox"/> Express Abandonment Request	<input type="checkbox"/> Terminal Disclaimer	<input type="checkbox"/> Return Postcard		
<input checked="" type="checkbox"/> Information Disclosure Statement (2 pages), PTO Form SB 08A (2 pages), PTO Form SB 08B (2 pages), and 21 Non-Patent Literature Documents	<input type="checkbox"/> Request for Refund			
<input type="checkbox"/> Certified Copy of Priority Document(s)	<input type="checkbox"/> CD, Number of CD(s) _____			
<input type="checkbox"/> Response to Missing Parts/ Incomplete Application				
<input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53				
<table border="1"> <tr> <td>Remarks</td> <td>The Commissioner is authorized to charge any additional fees to Deposit Account 20-1430.</td> </tr> </table>			Remarks	The Commissioner is authorized to charge any additional fees to Deposit Account 20-1430.
Remarks	The Commissioner is authorized to charge any additional fees to Deposit Account 20-1430.			
<p>No Fee Transmittal is attached as this IDS is being filed before the first Office Action has been received by Applicant.</p>				

**SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT**

Firm or Individual name	Townsend and Townsend and Crew LLP Roger T. Barrett	
Signature		
Date	Reg. No. 41,599 June 10, 2004	

**CERTIFICATE OF TRANSMISSION/MAILING**

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below.

Typed or printed name	Sara B. McPeak		
Signature		Date	June 10, 2004

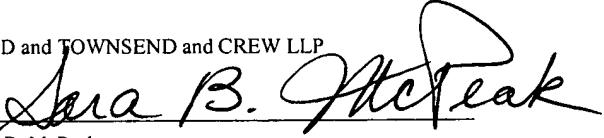
I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to:

**PATENT**  
Attorney Docket No.: 19930-001410US

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

On June 10, 2004



TOWNSEND and TOWNSEND and CREW LLP  
  
Sara B. McPeak

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application of:

M. Adrian Michalicek

Application No.: 10/619,940

Filed: July 14, 2003

For: HIDDEN FLEXURE ULTRA  
PLANAR OPTICAL ROUTING  
ELEMENT

Examiner: Unassigned

Art Unit: 2872

**INFORMATION DISCLOSURE  
STATEMENT UNDER 37 CFR §1.97 and  
§1.98**

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

The references cited on attached form PTO/SB/08A (2 pages) and 08B (2 pages) and are being called to the attention of the Examiner. This application is a continuation of and relies upon the following the following patent for an earlier effective filing date under 35 U.S.C. § 120:

U. S. Patent Application No. 09/859,069, filed May 15, 2001,  
now U. S. Pat. No. 6,608,712.

In accordance with 37 CFR §1.98(d), copies of those U. S. Patents or Publications that have been previously submitted to or cited by the Office in the parent application, or in co-pending Patent Application no. 10/161,838, filed June 3, 2002, are not enclosed.

In accordance with 37 CFR §1.98(a)(2), copies of non-patent literature references are enclosed.

It is respectfully requested that the cited references be expressly considered during the prosecution of this application, and the references be made of record therein and appear among the "references cited" on any patent to issue therefrom.

As provided for by 37 CFR 1.97(g) and (h), no inference should be made that the information and references cited are prior art merely because they are in this statement and no representation is being made that a search has been conducted or that this statement encompasses all the possible relevant information.

Applicant believes that no fee is required for submission of this statement, since it is being submitted prior to the first Office Action. However, if a fee is required, the Commissioner is authorized to deduct such fee from the undersigned's Deposit Account No. 20-1430. Please deduct any additional fees from, or credit any overpayment to, the above-noted Deposit Account.

Respectfully submitted,



Roger T. Barrett  
Reg. No. 41,599

TOWNSEND and TOWNSEND and CREW LLP  
Two Embarcadero Center, 8<sup>th</sup> Floor  
San Francisco, California 94111-3834  
Tel: 303-571-4000  
Fax: 303-571-4321  
RTB:sbm



Substitute for form 1449A/PTO

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet

1

of

4

**Complete if Known**

Application Number	10/619,940
Filing Date	July 14, 2003
First Named Inventor	Michalicek, M.A.
Art Unit	2872
Examiner Name	Unassigned

Attorney Docket Number 19930-001410

**U.S. PATENT DOCUMENTS**

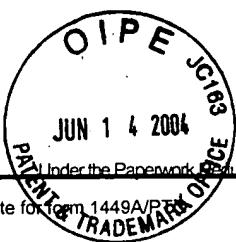
Examiner	Cite No. <sup>1</sup>	Document Number Number Kind Code <sup>2</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	AA	4,330,175	05-18-1982	Yohji Fujii et al.	
	AB	5,212,582	05-18-1993	William E. Nelson	
	AC	5,279,924	01-18-1994	Keiji Sakai et al.	
	AD	5,414,540	05-09-95	Patel et al.	
	AE	5,497,262	03-05-1996	Toshiyuki Kaeriyama	
	AF	5,600,383	02-04-1997	Larry J. Hornbeck	
		5,734,492	03-31-1998	Byung-Hwa Chung	
	AG	5,917,625	06-29-1999	Ogusu et al.	
	AH	5,940,203	08-17-1999	Carlo F. LaFlandra	
	AI	5,960,133	09-28-1999	Tomlinson	
	AJ	5,999,288	12-07-1999	Georgios Nicos Ellinas et al.	
	AK	5,999,672	12-07-1999	Hunter et al.	
	AL	6,028,689	02-22-2000	Michalicek et al.	
	AM	6,040,935	03-21-2000	Michalicek	
	AN	6,097,519	08-01-2000	Ford	
	AO	6,097,859	08-01-2000	Solgaard	
	AP	6,097,863	08-01-2000	Dipakbin Qasem Chowdhury	
	AQ	6,108,471	08-22-2000	Zhang et al.	
	AR	6,128,122	10-03-2000	Drake et al.	
	AS	6,147,790	11-14-2000	Robert E. Meier et al.	
	AT	6,307,657 B1	10-23-2001	Joseph Earl Ford	
	AU	6,253,001 B1	06-26-2001	Storrs T. Hoen	
	AV	6,330,102B1	12-11-2001	Michael J. Daneman et al.	
	AW	6,337,760B1	01-08-2002	Andrew G. Huibers et al.	
	AX	2002/0039225 A1	04-04-2002	Robert E. Meier et al.	
	AY	2002/0118472 A1	08-29-2002	Edward A. Hill	

Examiner Signature	Date Considered
--------------------	-----------------

<sup>1</sup> EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>2</sup> Unique citation designation number. <sup>3</sup> See attached Kinds of U.S. Patent Documents. <sup>4</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>5</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>6</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



Substitute for form 1449A/PTO  
PATENT AND TRADEMARK OFFICE

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet

2

of

4

### Complete if Known

Application Number	10/619,940
Filing Date	July 14, 2003
First Named Inventor	Michalicek, M. A.
Art Unit	2872
Examiner Name	Unassigned

Attorney Docket Number

19930-001410

### U.S. PATENT DOCUMENTS

Examiner	Cite No. <sup>1</sup>	Document Number Number Kind Code <sup>2</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
AZ		2002/0135850 A1	09-2002	Hagelin et al.	
BA		6,449,096 B1	09-10-2002	Larry Fabiny et al.	
CA		2002/0149834 A1	10-2002	Mei et al.	
CB		6,501,877 B1	12-31-2002	Robert T. Weverka et al.	
CC		2003/0011863 A1	01-2003	Muller	
CD		6,608,712 B2	08-19-2003	M. Adrian Michalicek	

### FOREIGN PATENT DOCUMENTS

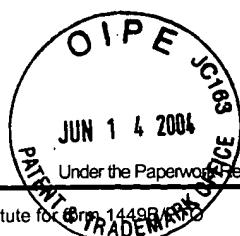
Examiner Initials <sup>4</sup>	Cite No. <sup>1</sup>	Foreign Patent Document		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup>	Number <sup>4</sup> Kind Code <sup>5</sup> (if known)				
CE							

Examiner Signature	Date Considered
--------------------	-----------------

<sup>1</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>2</sup> Unique citation designation number. <sup>3</sup> See attached Kinds of U.S. Patent Documents. <sup>4</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>5</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>6</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231  
60235916 v1



→

PTO/SB/08B (10-01)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for Form 1449B, R-9

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet

3 of 4

### Complete if Known

Application Number	10/619,940
Filing Date	July 14, 2003
First Named Inventor	Michalicek, M. A.
Art Unit	2872
Examiner Name	Unassigned

Attorney Docket Number 19930-001410

### OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	CF	T. Akiyama, et al.; "Controlled Stepwise Motion in Polysilicon Microstructures," Journal of Microelectromechanical Systems, Vol. 2, No. 3, September 1993; pp.106-110	
	CG	C.M.A. Ashruf, et al., "Galvanic porous silicon formation without external contacts," Sensors and Actuators 74 (1999) pp. 118-122	
	CH	Kenneth Bean, et al., "Anisotropic Etching of Silicon," IEEE Transactions on Electron Devices, Vol. Ed-25, No. 10, October 1978	
	CI	Dino R. Ciarlo, "A latching accelerometer fabricated by the anisotropic etching of (110) oriented silicon wafers," Lawrence Livermore Nat'l Laboratory, March 1, 1992	
	CJ	A.S. Dewa, et al., "Development of a Silicon Two-Axis Micromirror for an Optical CrossConnect," Solid State Sensors and Actuators Workshop, Hilton Head, South Carolina, pp. 93-96	
	CK	Joseph Ford et al., "Wavelength Add Drop Switching Using Tilting Micromirrors," Journal of Lightwave Technology, Vol. 17, No. 5, May 1999	
	CL	J. Grade et al., "A Large-Deflection Electrostatic Actuator for Optical Switching Applications, Solid-State Sensor and Actuator Workshop, Hilton Head Island, South Carolina, June 4-8, 2000; pp. 97-100	
	CM	Robert E. Hopkins, <i>Some Thoughts On Lens Mounting</i> , Optical Engineering, September-October 1976, Vol. 15, No. 5, pgs. 428-430.	
	CN	V. Kaajakari et al.; "Ultrasonic Actuation for MEMS Dormancy-Related Stiction Reduction," In MEMS Reliability for Critical Applications, Proceedings of SAPIE Vol. 4180 (2000); pp. 60-65	
	CO	T.L. Koch et al., "Anisotropically etched deep gratings for InP/InGaAsP optical devices," J.App. Phys. 62 (8), 15 October 1987	
	CP	I. Nishi et al., "Broad-Passband-Width Optical Filter for Multi-Demultiplexer Using a Diffraction Grating and a Retroreflector Prism," Electronics Letters, Vol. 21, No. 10, 9 <sup>th</sup> May 1985	
	CQ	P. Phillippe et al., "Wavelength demultiplexer: using echelle gratings on silicon substrate," Applied Optics, Vol. 24, No. 7, 1 April 1985	
	CR	R. D. Rallison, White Paper on: <i>Dense Wavelength Division Multiplexing (DWDM) and the Dickson Grating</i> , January 6, 2001, 9 pages.	

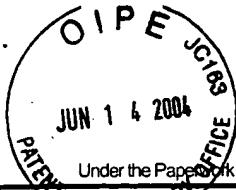
Examiner Signature	Date Considered
--------------------	-----------------

<sup>1</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

60235916 v1



→

PTO/SB/08B (10-01)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE  
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for TRADEMARK PTO

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet

4 of 4

### Complete if Known

Application Number	10/619,940
Filing Date	July 14, 2003
First Named Inventor	Michalicek, M. A.
Art Unit	2872
Examiner Name	Unassigned

Attorney Docket Number 19930-001410

### OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	cs	M. Schilling et al., "Deformation-free overgrowth of reactive ion beam etched submicron structures in InP by liquid phase epitaxy," Appl. Phys. Lett. 49 (12), 22 September 1986	
	ct	Z. J. Sun et al., Demultiplexer with 120 channels and 0.29-nm Channel Spacing," IEEE Photonics Technology Letters, Vol. 10, No. 1, January 1998	
	cu	W. Tang, et al., "Electrostatically Balanced Comb Drive for Controlled Levitation," Reprinted from Technical Digest IEEE Solid-State Sensor and Actuator Workshop, June 1990; pp. 198-202	
	cv	L. Torcheux et al., "Electrochemical Coupling Effects on the Corrosion of Silicon Samples in HF Solutions," J. Electrochem.Soc., Vol. 142, No. 6, June 1995	
	cw	P. VanKessel et al., "A MEMS-Based Projection Display," Proceedings of the IEEE, Vol. 86, No. 8, August 1998; pp. 1687-1704	
	cx	Microfabricated Silicon High Aspect Ratio Flexures for In-Plane Motion; dissertation by C. Keller, Fall 1998	
	cy	Gimballed Electrostatic Microactuators with Embedded Interconnects; dissertation by L. Muller; Spring 2000	
	cZ	Transducer Elements, Piezo Systems, Inc., Cambridge MA, Catalog #3, 1998, pgs. 30-45.	

Examiner Signature	Date Considered
--------------------	-----------------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

60235916 v1